Monitored Ethernet Switches
10 & 18 port, SNMP, Modbus/TCP
Models SEC310-2SFP-T, SEC318-2SFP-T

Features & Benefits

• Communicates with HMI/SCADA software via Modbus/TCP
• Integrated with iView²™ - SNMP Management Software (free download)
• Energy Efficient Ethernet (EEE), IEEE 802.3az for low energy consumption
• Wide temperature range -40 to 75°C
• DIN rail or wall/panel mountable
• Redundant dual 12 to 48 VDC power inputs
• EMS Level 3 Protection
• Designed for hazardous locations: UL C1D2, ATEX Zone 2 (pending), IECEx (pending)
• Port-based QoS feature for deterministic data transmission
• Loop detection and event alarm
• Power failure indicated by a relay and LED indicator

Introduction
SE300 series is the industry’s first design for Ethernet Green®, IEEE802.3az - Energy Ethernet switches that cut power usage by up to 60%, significantly saving energy usage in the field and reducing total cost of ownership over 24/7.

Advantech B+B SmartWorx SE300 series monitored switches can be used as plug-and-play unmanaged switches right out of the box. Installing the iView² Network Management Software gives them basic monitoring and management capabilities as well. They bridge the gap between unmanaged switches and significantly more expensive, fully managed solutions.

When enabled with iView², these switches provide IP address assignment, allowing for a static IP address or an address that is discoverable via DHCP in the network. Then, these switches have the ability to use Modbus/TCP to communicate with HMI/SCADA software and SNMP to communicate with NMS (Networking Management Software) at the same time. This gives full access control to both control engineers and IT managers.

Basic Monitoring & Management Capabilities
iView² gives network managers the ability to monitor and manage eWorx SE300 series switches from a central location. It features an intuitive Graphical User Interface (GUI) that provides a real-life representation of all installed eWorx SE300 Series switches, displaying device functions, port settings, device status information and traffic statistics via SNMP.

iView² can also configure eWorx SE300 series switches monitoring capabilities for automation applications via the popular Modbus TCP/IP protocol. Control engineers can use existing HMI/SCADA software to integrate the network status by creating extra tags for real-time monitoring. iView² is a standalone software that supports multiple platforms and operating systems.

iView² Features for eWorx SE300 series Switches
Monitoring:
• System information (IP/MAC address)
• Port status
• Port speed
• Flow control
• Link up counter
• TX packets counter, RX packets counter
• TX error packets counter, RX error packets counter
• Firmware version
• PoE status (PoE model/s only)

Management:
• Configure IP mode
• Set IP address
• Set TCP Modbus/TCP time-out
• Create Community Strings
• Configure Traps

Specifications

<table>
<thead>
<tr>
<th>COMMUNICATIONS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>IEEE 802.3, 802.3u, 802.3x, 802.3ab, 802.3z, 802.1p, 802.3az</td>
</tr>
<tr>
<td>LAN</td>
<td>10/100/1000Base-T(X), Optional 100Base-FX, 1000Base-SX/LX/LH/XC/X2/XZ</td>
</tr>
<tr>
<td>Transmission Distance</td>
<td>Ethernet: 100m (4-wire Cat.5e, Cat.6 RJ-45 cable suggested for Gigabit port) SFP: 110km (depends on SFP)</td>
</tr>
<tr>
<td>Transmission Speed</td>
<td>Ethernet: 10/100Mbps Auto-Negotiation Gigabit Copper: 10/100/1000Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000Mbps</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>INTERFACE</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>SEC310-2SFP-T: 8 x RJ45 + 2 x (RJ45/SFP) combo ports SEC318-2SFP-T: 16 x RJ45 + 2 x (RJ45/SFP) combo ports 6-pin removable screw terminal (power &amp; relay)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>Auto Sensing, 10/100/1000BaseT(X), Duplex and MDIX.</td>
</tr>
<tr>
<td>LED Indicators</td>
<td>P1, P2, P-Fail, Loop Detection 10/100T(X): Link/Activity, Speed Gigabit Copper: Link/Activity, Speed (1000 Mbps) SFP: Link/Activity</td>
</tr>
</tbody>
</table>

All product specifications are subject to change without notice.

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**Specifications - continued**

### ENVIRONMENT
- **Operating Temperature**: -40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature**: -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity**: 10 ~ 95% (non-condensing)
- **Storage Humidity**: 10 ~ 95% (non-condensing)
- **MTBF**: SEC310-2SFP-T: 3,183,604 hours, SEC318-2SFP-T: 2,825,281 hours

### CERTIFICATIONS
- **Hazardous Environments**: UL Class 1 Division 2 Groups A,B,C,D; ATEX Zone 2 (pending); IECEx (pending)
- **Safety**: UL508
- **EMI**: FCC Part 15 Subpart B Class A, EN 55011/55022, Class A
- **EMS**: EN 61000-4-2 (Level 3), EN 61000-4-3 (Level 3), EN 61000-4-4 (Level 3), EN 61000-4-5 (Level 3), EN 61000-4-6 (Level 3), EN 61000-4-8 (Level 3)
- **Shock**: IEC 60068-2-27
- **Freefall**: IEC 60068-2-32
- **Vibration**: IEC 60068-2-6

### SOFTWARE
- **Management**: iView², LLDP, SNMP v1/v2c, Modbus/TCP
- **Configuration**: Static IP address, DHCP Client
- **Monitoring**: Port Statistics (Speed/Status), Link Up/Down counter, Error Packet counter, Loop detection
- **Filter**: Flow control, IEEE 802.1q QoS (Strict mode), Broadcast storm protection
- **Industrial Profiles**: Modbus/TCP profiles included - Configuration and Diagnostic via automation software tools like e.g. Wonderware InTouch, STEP7, InduSoft Web Studio

### IVIEW² - NETWORK MANAGEMENT SOFTWARE - FREE DOWNLOAD
- **Version**: iView² Web-based Application
- **OS Support**: 32-bit/64-bit Windows XP/Vista/7, Windows Server 2003/2008 R2
- **Operation Modes**: Local Computer or Remote Server
- **Web Browser**: Microsoft® IE, Chrome, Firefox
- **Protocol**: SNMPv1 and SNMPv2c

**Product Ordering Information**

<table>
<thead>
<tr>
<th>MODEL #</th>
<th>DESCRIPTION</th>
<th>OPERATING TEMPERATURE</th>
<th>RJ45</th>
<th>FIBER</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10/100 MBPS</td>
<td>GIGABIT</td>
<td>100FX</td>
</tr>
<tr>
<td>SEC310-2SFP-T</td>
<td>8-port 10/100Mbps + 2-port GbE Combo Monitored Ethernet Switch</td>
<td>-40 ~ 75°C</td>
<td>8</td>
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<tr>
<td>SEC318-2SFP-T</td>
<td>16-port 10/100Mbps + 2-port GbE Combo Monitored Ethernet Switch</td>
<td>-40 ~ 75°C</td>
<td>16</td>
<td>-</td>
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</table>

### Accessories - optional

<table>
<thead>
<tr>
<th>MODEL #</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>MDR-40-24</td>
<td>DIN Rail Power supply, 24VDC 40 Watt</td>
</tr>
<tr>
<td>CSUMB3FBG</td>
<td>3 fl. (1 ml), Gray, Category 5e UTP Patch Cord</td>
</tr>
<tr>
<td>CSUMB7FBG</td>
<td>7 fl. (2 ml), Gray, Category 5e UTP Patch Cord</td>
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<tr>
<td>808-38102</td>
<td>IE-SFP 100 to 155 Mbps (OC-3), MM850-LC, 2km</td>
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<tr>
<td>808-38104</td>
<td>IE-SFP 100 to 155 Mbps (OC-3), SM1310/PLUS-LC, 40km</td>
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<tr>
<td>808-38200</td>
<td>IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), SM1310-LC, 20km</td>
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<tr>
<td>808-38201</td>
<td>IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), MM850-LC, 2250/550m</td>
</tr>
<tr>
<td>808-38203</td>
<td>IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), SM1310/PLUS-LC, 30km</td>
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### Package Checklist
- Ethernet Switch, Quick Start Guide, DIN-Rail mount bracket (installed), Wall mount bracket

### Warranty
- Limited lifetime warranty for Advantech B+B designed and/or manufactured products.